BYTE-WIDE OPTICAL BACKPLANE SWITCH AND SWITCHING METHOD

Abstract of the Disclosure

A byte-wide optical switch and switching method are provided. The optical switch includes a first set of ports for receiving in parallel an optical byte of data, and multiple second sets of ports each capable of outputting in parallel the optical byte of data. An array of optical switching elements is disposed between the first set of ports and the multiple second sets of ports. The array of optical switching elements direct the optical byte of data in parallel from the first set of ports to at least one second set of ports of the multiple second sets of ports. The switching elements may comprise micro-electro mechanical system (MEMS) devices, each having a position controllable reflective surface. Thin film optical filters can be provided on the reflective surfaces for wavelength selective switching.